AMENDMENT TO THE CLAIMS:

This listing of claims will replace all prior listings of claims in the application:

LISTING OF CLAIMS:

1. (ORIGINAL) A MHC Class I-restricted epitope peptide derived from survivin, said epitope having at least one of the following characteristics:

(i) capable of binding to the Class I HLA molecule to which it is restricted at an affinity as measured by the amount of the peptide that is capable of half maximal recovery of the Class I HLA molecule (C_{50} value) which is at the most 50 μM as determined by the assembly binding assay as described herein,

(ii) capable of eliciting INF-γ-producing cells in a PBL population of a cancer patient at a frequency of at least 1 per 10^4 PBLs as determined by an ELISPOT assay, and/or

(iii) capable of *in situ* detection in a tumor tissue of CTLs that are reactive with the epitope peptide.

2. (ORIGINAL) A peptide according to claim 1 having a C50 value, which is at the most 30 μM.

3. (ORIGINAL) A peptide according to claim 2 having a C50 value, which is at the most 20 μM.

4. (ORIGINAL) A peptide according to claim 1, which is restricted by a MHC Class I HLA-A molecule.

5. (ORIGINAL) A peptide according to claim 4, which is restricted by a MHC Class I HLA species selected from the group consisting of HLA-A1, HLA-A2, HLA-A3, HLA-A11 and HLA-A24.

6. (ORIGINAL) A peptide according to claim 5, which is restricted by HLA-A2.

7. (ORIGINAL) A peptide according to claim 6, which is selected from the group consisting of FLKLDRERA (SEQ ID NO:1), TLPPAWQPFL (SEQ ID NO:2), ELTLGEFLKL (SEQ ID NO:3), LLLGEFLKL (SEQ ID NO:4) and LMLGEFLKL (SEQ ID NO:5).

8. (ORIGINAL) A peptide according to claim 1, which is restricted by a MHC Class I HLA-B molecule.

9. (ORIGINAL) A peptide according to claim 8, which is restricted by a MHC Class I HLA-B species selected from the group consisting of HLA-B7, HLA -B35, HLA -B44, HLA-B8, HLA-B15, HLA-B27 and HLA-B51.

10. (ORIGINAL) A peptide according to claim 9, which is restricted by HLA-B35.

11. (ORIGINAL) A peptide according to claim 10, which is selected from the group consisting of CPTENEPDL (SEQ ID NO:6), EPDLAQCFF (SEQ ID NO:7), CPTENEPDY (SEQ ID NO:8) and EPDLAQCFY (SEQ ID NO:9).

12. (ORIGINAL) A peptide according to claim 1 comprising at the most 20 amino acid residues.

13. (ORIGINAL) A peptide according to claim 12 that comprises at the most 10 amino acid residues.

14. (ORIGINAL) A peptide according to claim 1, which is a nonapeptide or a decapeptide.

15. (ORIGINAL) A peptide according to claim 1, which is a native sequence of survivin of a mammal species.

16. (ORIGINAL) A peptide according to claim 15 that is derived from human survivin.

17. (ORIGINAL) A peptide according to claim 1, which is derived from a native sequence of survivin by substituting, deleting or adding at least one amino acid residue.

18. (ORIGINAL) A peptide according to any of the preceding claims, which is phosphorylated.

19. (ORIGINAL) A peptide according to claim 18, which comprises Thr34 of the native survivin disclosed in US 6,45,23.

20. (ORIGINAL) A peptide according to claim 1 comprising, for each specific HLA allele, any of the amino acid residues as indicated in the following table:

HLA allele	Position 1	Position 2	Position 3	Position 5	Position 6	Position 7	C-terminal
HLA-A1		T,S	D,E			L	Y
HLA-A2		L, M			V		L,V
HLA-A3		L,V,M	F,Y				K, Y, F
HLA-A11		V,I,F,Y	M,L,F,Y ,I				K, R
HLA-A23		I,Y					W,I
HLA-A24		Y		I,V	F		I,L,F
HLA-A25		M,A,T	I				W
HLA-A26	E,D	V,T,I,L, F			I,L,V		Y,F
HLA-A28	E,D	V,A,L					A,R
HLA-A29		E					Y,L
HLA-A30		Y,L,F,V					Y
HLA-A31			L,M,F,Y				R
HLA-A32		I,L					W
HLA-A33		Y,I,L,V					R
HLA-A34		V,L					R
HLA-A66	E,D	T,V					R,K
HLA-A68	E,D	T,V					R,K
HLA-A69		V,T,A					V,L
HLA-A74		T					V,L
HLA-B5		A,P	F,Y				I,L
HLA-B7		P					L,F
HLA-B8			K	K,R			L
HLA-B14		R,K					L,V
HLA-B15 (B62)		Q,L,K,P ,H,V,I, M,S,T					F,Y,W
HLA-B17							L,V
HLA-B27		R					Y, K,F,L
HLA-B35		P					I, L, M, Y
HLA-B37		D,E					I,L,M
HLA-B38		H	D,E				F,L
HLA-B39		R,H					L,F
HLA-B40 (B60,61)		E	F,I,V				L,V,A,W,M, T,R
HLA-B42		L,P					Y,L
HLA-B44		E					F,Y,W
HLA-B46		M,I,L,V					Y,F
HLA-B48		Q,K					L
HLA-B51		A,P,G					F,Y,I,V
HLA-B52		Q	F,Y				I,V

HLA-B53		P				W,F,L
HLA-B54		P				
HLA-B55		P				A,V
HLA-B56		P				A,V
HLA-B57		A,T,S				F,W,Y
HLA-B58		A,T,S				F,W,Y
HLA-B67		P				L
HLA-B73		R				P
HLA-Cw1		A,L				L
HLA-Cw2		A,L				F,Y
HLA-Cw3		A,L				L,M
HLA-Cw4		Y,P,F				L,M,F,Y
HLA-Cw6						L,I,V,Y
HLA-Cw6		Y				L,Y,F
HLA-Cw8		Y				L,I,
HLA-Cw16		A,L				L,V

21. (ORIGINAL) A peptide according to claims 1 that is capable of eliciting INF-γ-producing cells in a PBL population of a cancer patient at a frequency of at least 10 per 104 PBLs.

22. (ORIGINAL) A peptide according to claim 1, which is capable of eliciting INF-γ-producing cells in a PBL population of a patient having a cancer disease where survivin is expressed.

23. (ORIGINAL) A peptide according to claim 22 where the cancer disease is selected from the group consisting of a haematopoietic malignancy including chronic lymphatic leukemia and chronic myeloid leukemia, melanoma, breast cancer, cervix cancer, ovary cancer, lung cancer, colon cancer, pancreas cancer and prostate cancer.

24. (ORIGINAL) A peptide according to claim 1, which is capable of eliciting INF-γ-producing cells in a PBL population of a patient having a cancer disease, said INF-γ-producing

cells having cytotoxic effect against survivin expressing cells of a cancer cell line, including a cell line selected from the group consisting of the breast cancer cell line MCF-7 and the melanoma cell line FM3.

25. (ORIGINAL) A pharmaceutical composition comprising the peptide according to claim 1.

26. (CURRENTLY AMENDED) A composition according to claim 25 that comprises a peptide **having a sequence contained in native human survivin** ~~according to claim 4~~ in combination with **another** ~~a~~ **modified survivin** peptide that **differs from a peptide which is contained in a native survivin by the presence of at least one substitution, deletion or addition amino acid modification** ~~according to claim 8~~.

27. (CURRENTLY AMENDED) A composition according to claim 26 comprising a **native survivin** peptide **having the sequence contained in SEQ ID NO:36 (FTELTLGEF) in combination with another modified survivin peptide having the sequence contained in SEQ ID NO:14 (STFKNWPFL)** ~~according to claim 6 in combination with a peptide according to claim 10~~.

28. (ORIGINAL) A composition according to claim 25, which is a vaccine capable of eliciting an immune response against a cancer disease.

29. (ORIGINAL) A composition according to claim 25, further comprising an immunogenic protein or peptide fragment selected from a protein or peptide fragment not belonging to or derived from the survivin protein family.

30. (ORIGINAL) A composition according to claim 29, where the protein or peptide fragment not belonging to or derived from the survivin protein family is a protein, or peptide fragment hereof, involved in regulation of cell apoptosis.

31. (ORIGINAL) A composition according to claim 29 where the immunogenic protein or peptide fragment selected from a protein or peptide fragment hereof not belonging to or derived from the survivin protein family is Bcl-2 or a peptide fragment hereof.

32. (ORIGINAL) A composition according to claim 25, which is a multiepitope vaccine.

33. (ORIGINAL) A composition according to claim 28 where the vaccine is capable of eliciting an immune response against a cancer disease where survivin is expressed.

34. (ORIGINAL) A composition according to claim 33 where the cancer disease is selected from the group consisting of a haematopoietic malignancy including chronic lymphatic leukemia and chronic myeloid leukemia, melanoma, breast cancer, cervix cancer, ovary cancer, lung cancer, colon cancer, pancreas cancer and prostate cancer.

35. (ORIGINAL) A composition according to claim 33 or 34 where the vaccine elicits the production in the vaccinated subject of effector T-cells having a cytotoxic effect against the cancer cells.

36. (ORIGINAL) A composition for ex vivo or in situ diagnosis of the presence in a cancer patient of survivin reactive T-cells among PBLs or in tumor tissue, the composition comprising a peptide according to claim 1.

37. (ORIGINAL) A diagnostic kit for ex vivo or in situ diagnosis of the presence in a cancer patient of survivin reactive T-cells among PBLs or in tumour tissue comprising a peptide according to claim 1.

38. (ORIGINAL) A complex of a peptide according to claims 1 and a Class I HLA molecule or a fragment of such molecule.

39. (ORIGINAL) A complex according to claim 38 which is monomeric.

40. (ORIGINAL) A complex according to claim 38 which is multimeric.

41. (ORIGINAL) A method of detecting in a cancer patient the presence of survivin reactive T-cells, the method comprising contacting a tumour tissue or a blood sample with a complex according to claim 38 and detecting binding of the complex to the tissue or the blood cells.

42. (ORIGINAL) A molecule that is capable of binding specifically to a peptide according to claims 1.

43. (ORIGINAL) A molecule according to claim 36 which is an antibody or a fragment hereof.

44. (ORIGINAL) A molecule that is capable of blocking the binding of a molecule according to claim 42 or 43.

45. (ORIGINAL) A method of treating a cancer disease, the method comprising administering to a patient suffering from the disease an effective amount of the composition according to claim 25, a molecule according to claim 42 or a molecule according to claim 44.

46. (ORIGINAL) A method according to claim 45 wherein the disease to be treated is a cancer disease where survivin is expressed.

47. (ORIGINAL) A method according to claim 46 wherein the cancer disease is selected from the group consisting of a haematopoietic malignancy including chronic lymphatic leukemia and chronic myeloid leukemia, melanoma, breast cancer, cervix cancer, ovary cancer, lung cancer, colon cancer, pancreas cancer and prostate cancer.

48. (ORIGINAL) A method according to claim 45, which is combined with a further treatment.

49. (ORIGINAL) A method according to claim 48 wherein the further treatment is radiotherapy or chemotherapy.